

Newest 10 in. by 60 ft. auger shown with stabilizers fully extended to 18 ft.

## SAFETY LADDERS, 50 MPH ROAD SPEED, AND THEY UNLOAD AS WELL AS LOAD BINS

## 'Go Anywhere' Grain Augers

"It's as simple to move them from one bin to another as it is to move an empty truck out and a loaded one in," says Sterling Wolery, Joplin, Mont., wheat and barley producer who built three of the slickest "go anywhere" self-propelled grain augers you ever saw. They're loaded with features not found on factory-made commercial augers.

With all three models, the key feature is fast, easy movement down the road (at 50 mph) or from bin to bin. All three are equipped with built-in safety ladders running lengthwise along the tube so workers can easily run to the top of the bin to open the lid, and to make periodic inspections as the bin is being filled.

Another key feature of the augers is that they can empty bins as well as fill them. The low "input" end of the auger can be driven up to the bin door and then work its way into the bin for gravity unloading of all except the last 1,200 or so bushels, which is removed by attaching a drag auger. "They also work great for moving grain in or out of flat storage, and for cleaning out trucks that are stuck in the field. We can drive one of the augers right out into the field, run the input end up to the rear of the disabled truck and unload its content into another truck," explains Wolery.

He built his first self-propelled auger, a 60 footer with a 10 in, dia, tube, last year. He stripped a 1954 Chevrolet truck frame and lengthened it to 7 ft. to better accommodate

the long auger. An old Buick 401 engine was added, along with automatic transmis-"With the frame stretched out, it makes the old truck drive and ride better," notes Wolery

He built the other two models this year. One is equipped with an 8 in. dia. tube 50 ft. long. It's built on an International, K-5 frame and is powered by a Chevrolet 283 engine. The other sports a 10 in. dia. auger 60 ft. long, same as the first auger Wolery built. However, unlike the older 60 footer, it can be fitted with a drag auger for cleaning out bins. Its frame and engine were salvaged from a 1953 Ford 2-ton truck.

Both newer augers are equipped with wing stabilizers on the rear which, when extended, are 17.5 ft. wide. Hydraulic components run the augers, the raising and lowering mechanisms, and the stabilizers. A hydraulically-powered cable winch raises the augers' rear ends; a hydraulic cylinder lifts the front ends. A small hydraulic motor turns the winching mechanism, which is secured by an ordinary brake and drum from an old car.

The hydraulic lift is fast. You can change bins and be set up again in 5 minutes," says Wolery.

For more information, contact: FARM SHOW Followup, Sterling Wolery, Box 22, Rt. 1, Joplin, Mont. 59531 (ph 406 292-



The 70 by 32-ft. shed features a clear plastic roof and straw-bale sidewalls.

## **KEEPS NEWBORN CALVES "TOASTY WARM"**

## Low-Cost Calving Shed Made From Straw Bales

By Bill Gergen

"It keeps newborn calves 'toasty warm,' even when outside temperatures reach 20° below zero," says Alma Hubbard, Grace, Idaho, of his low-cost calving shed made of straw bales and plastic. The 70 by 32 ft. shed features a clear plastic roof and straw-bale sidewalls. "It's almost three years old and has proved to be durable," says Hubbard. "It even made it through a tornado.'

Forming the shed's walls are 55 one-ton rectangular 4 by 4 by 8 ft. straw bales. The walls are three bales high in front (north side) and two bales high in back (south side). There's a 12 ft. wide walkway along the north side, and a 3 ft. walkway on the other three sides, with six pens, each 10 ft. square, between the walkways.

The stalls are arranged far enough away from the bales so that cows won't eat the walls. Two doors provide cross ventilation. Gaps between the bales let heat escape and help keep humidity at optimum levels to minimize condensation. The dirt floor is covered with straw and the plastic roof provides warmth during cold weather. It's made of two layers of 8 mil clear, heat shrink plastic, and is slanted to shed snow and rain. The clear plastic absorbs sunlight and heat during the day and radiates it back out at night," says Hubbard. "The shed's main benefit is that it gets calves off to a fast, healthy start. As soon as calves are dropped outside, we bring them and the mother cow into the shed and keep them there for 12 to 24 hours," explains Hubbard. "We make sure calves get that first colostrum milk, eartag them and give them 7-way and vitamin shots.

Hubbard estimates the shed's construction cost at about \$2,300. That includes \$825 for the 55 straw bales (\$15 per bale); \$1,000 for the roof (double layers of clear plastic); and \$475 for lumber and labor. With a conventional calving shed, it's likely that you couldn't put in a cement foundation for \$2,300. Besides, when we tear down someday, we can reuse the lumber and convert the straw to bedding. I expect it to last another five years with very little maintenance."

To make the roof, Hubbard wrapped double layers of 8 mil clear plastic around the 2 by 6 in, rafters, then heated the heatshrink plastic with a propane torch which caused the inside and outside layers to stick to each other and tighten up. There's no sagging between the 2 by 6's and the plastic, which has never ripped., says Hubbard.

The shed is designed so he can pull out and replace the straw bales, or even expand the structure up to twice its size. He's convinced that straw and plastic could be used to economically make other farm buildings, such as a greenhouse or garage.

For more information, contact: FARM SHOW Followup, Alma Hubbard, Rt. 1, Box 230., Grace, Idaho 83241 (ph 208 425-3366).



To unload bins, the input end of the auger can be driven up to the bin door to work its way inside.



Hubbard says his straw shed increases calf weaning weights and decreases death